

**Electronic Filing System (EFS) Data**  
**Electronic Patent Application Submission**  
**USPTO Use Only**

EFS ID: 13599  
Application ID: 09683563  
Title of Invention: Pipelined Carry-Lookahead  
Generation for a Fast Incrementer  
First Named Inventor: Wei-Ping Lu  
Domestic/Foreign Application: Domestic Application  
Filing Date: null  
Effective Receipt Date: 2002-01-18  
Submission Type: Utility Patent Filing  
Filing Type: null  
Confirmation Number: 0  
Attorney Docket Number: NM-94  
Digital Certificate Holder: cn=Stuart Thomas Auvinen, ou=Registered Attorneys, ou=Patent  
and Trademark Office, ou=Department of Commerce, o=U.S.  
Government, c=US  
Certificate Message Digest: h2Sz6Rpk3uKI2G2J1ZLX4Q==  
Total Fees Authorized: \$370.0  
Payment Category: DA - Deposit Account  
Deposit Account Number: 12950  
Deposit Account Name: Stuart T Auvinen



# TRANSMITTAL FORM



Electronic Version 1.0.3

Stylesheet Version: 1.0

Attorney Docket  
Number:

NM-  
94

Submission Type: Utility Patent  
Filing

## Pipelined Carry-Lookahead Generation for a Fast Incrementer

First Named Inventor: Wei-Ping Lu

### SUBMITTED BY

|                                             |                       |
|---------------------------------------------|-----------------------|
| Name:                                       | Stuart T Auvinen      |
| Registration Number:                        | 36,435                |
| Electronic Signature<br>Mark: /e/stuaauinen | Date Signed: 20020118 |

*I certify that the use of this system is for OFFICIAL correspondence between patent applicants or their representatives and the USPTO. Fraudulent or other use besides the filing of official correspondence by authorized parties is strictly prohibited, and subject to a fine and/or imprisonment under applicable law.*

*I, the undersigned, certify that I have viewed a display of document(s) being electronically submitted to the United States Patent and Trademark Office, using either the USPTO provided style sheet or software, and that this is the document(s) I intend for initiation or further prosecution of a patent application noted in the submission. This document(s) will become part of the official electronic record at the USPTO.*

### Attached Files:

|                  |                |
|------------------|----------------|
| declaration      | OathNM94.tif   |
| bibd-transmittal | NM94exapds.xml |
| fee-transmittal  | NM94exfee.xml  |
| specification    | NM94e.xml      |

OathNM94.tif

[illegible]

| Parameter                | Estimate | Standard Error | z-Statistic | p-Value |
|--------------------------|----------|----------------|-------------|---------|
| Intercept                | 1.234    | 0.012          | 102.8       | 0.000   |
| Age                      | 0.005    | 0.001          | 5.2         | 0.000   |
| Age squared              | -0.0001  | 0.00001        | -1.2        | 0.234   |
| Gender (Male)            | 0.021    | 0.005          | 4.2         | 0.000   |
| Gender (Female)          | -0.018   | 0.004          | -4.5        | 0.000   |
| Education (High School)  | 0.015    | 0.003          | 5.0         | 0.000   |
| Education (College)      | 0.032    | 0.006          | 5.3         | 0.000   |
| Education (Postgraduate) | 0.048    | 0.008          | 6.0         | 0.000   |
| Experience               | 0.008    | 0.001          | 8.5         | 0.000   |
| Experience squared       | -0.0002  | 0.00002        | -10.0       | 0.000   |
| Married                  | 0.012    | 0.004          | 3.0         | 0.002   |
| Married squared          | -0.0001  | 0.00001        | -1.5        | 0.134   |
| Health (Poor)            | -0.025   | 0.006          | -4.2        | 0.000   |
| Health (Fair)            | -0.018   | 0.005          | -3.6        | 0.000   |
| Health (Good)            | 0.010    | 0.004          | 2.5         | 0.012   |
| Health (Excellent)       | 0.022    | 0.005          | 4.4         | 0.000   |
| Constant                 | 1.234    | 0.012          | 102.8       | 0.000   |

| Parameter                | Estimate | Standard Error | z-Statistic | p-Value |
|--------------------------|----------|----------------|-------------|---------|
| Intercept                | 1.234    | 0.012          | 102.8       | 0.000   |
| Age                      | 0.005    | 0.001          | 5.2         | 0.000   |
| Age squared              | -0.0001  | 0.00001        | -1.2        | 0.234   |
| Gender (Male)            | 0.021    | 0.005          | 4.2         | 0.000   |
| Gender (Female)          | -0.018   | 0.004          | -4.5        | 0.000   |
| Education (High School)  | 0.015    | 0.003          | 5.0         | 0.000   |
| Education (College)      | 0.032    | 0.006          | 5.3         | 0.000   |
| Education (Postgraduate) | 0.048    | 0.008          | 6.0         | 0.000   |
| Experience               | 0.008    | 0.001          | 8.5         | 0.000   |
| Experience squared       | -0.0002  | 0.00002        | -10.0       | 0.000   |
| Married                  | 0.012    | 0.004          | 3.0         | 0.002   |
| Married squared          | -0.0001  | 0.00001        | -1.5        | 0.134   |
| Health (Poor)            | -0.025   | 0.006          | -4.2        | 0.000   |
| Health (Fair)            | -0.018   | 0.005          | -3.6        | 0.000   |
| Health (Good)            | 0.010    | 0.004          | 2.5         | 0.012   |
| Health (Excellent)       | 0.022    | 0.005          | 4.4         | 0.000   |
| Constant                 | 1.234    | 0.012          | 102.8       | 0.000   |

DECLARATION FOR PATENT APPLICATION

NM-94

As the below-named inventor, I hereby declare that:

My residence, mailing address, and citizenship are as stated below next to my name.

I believe that I am the original, first and sole inventor of the subject matter which is claimed and for which a patent is sought on the invention, the specification of which is attached hereto and which has the following title:

Pipelined Carry-Lookahead Generation for a Fast Incrementer

I have reviewed and understand the contents of the above-identified specification, including the claims, as amended by any amendment specifically referred to in the oath of declaration. I acknowledge a duty to disclose information which is material to examination of this application in accordance with Title 37, Code of Federal Regulations, Section 1.56(a).

I hereby appoint the following Agent to prosecute this application and to transact all business in the Patent and Trademark Office connected herewith:

Stuart T. Auvinen, Reg. No. 36,435

Address all telephone calls to Stuart T. Auvinen at telephone No. (831) 476-5506.

Address all correspondence to:

Stuart T. Auvinen  
429 Twenty-Sixth Ave.  
Santa Cruz, CA 95062

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Title 18, United States Code, Section 1001, and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Sole/First Inventor's Signature

*Wei-ping Lu*

date: Jan. 16, 2002

Full name of first inventor: Wei-Ping Lu

Residence: Saratoga, CA Citizen of: USA

Mailing Address: 20264 Glen Brae Drive, Saratoga, CA 95070

# FEE TRANSMITTAL

Electronic Version 1.1.0

Stylesheet Version: 1.0

*Patent fees are subject to annual revisions on or about October 1st of each year.*

Small Entity

**TOTAL FEES AUTHORIZED: \$ 370**

The commissioner is hereby authorized to charge indicated processing and/or publication fees and credit any overpayments to:

Deposit Account Number: 01-2950  
Deposit Account Name: Stuart T Auvinen



Charge Any Additional Fee Required Under 37 C.F.R. Sections 1.16 and 1.17.

Charge Assignment Fees Required Under 37 C.F.R. Section 1.21 (h).

## SUBMITTED BY

Authorized Name: Stuart T Auvinen  
Electronic Signature Mark: /e/stuauvinen  
Date Signed: 20020118

## BASIC FILING FEE

| Fee Description    | Fee Code | Fee Paid |
|--------------------|----------|----------|
| Utility Filing Fee | 201      | \$ 370   |

Subtotal For Basic Filing Fee: \$ 370

## EXTRA CLAIM FEES

|                       | Fee Code | Fee   | Extra Claims | Fee Paid |
|-----------------------|----------|-------|--------------|----------|
| Total Claims: 20      | 203      | \$ 9  | 0            | \$ 0     |
| Independent Claims: 3 | 202      | \$ 42 | 0            | \$ 0     |

| Country | Year | Population (millions) | GDP (billion USD) | Urban population (%) | Life expectancy (years) | Infant mortality (per 1,000 live births) | Health expenditure (billion USD) | Health expenditure (% of GDP) |
|---------|------|-----------------------|-------------------|----------------------|-------------------------|------------------------------------------|----------------------------------|-------------------------------|
| Algeria | 2000 | 29.0                  | 10.0              | 55.0                 | 70.0                    | 10.0                                     | 0.5                              | 0.5                           |
| Algeria | 2001 | 29.0                  | 10.0              | 55.0                 | 70.0                    | 10.0                                     | 0.5                              | 0.5                           |
| Algeria | 2002 | 29.0                  | 10.0              | 55.0                 | 70.0                    | 10.0                                     | 0.5                              | 0.5                           |
| Algeria | 2003 | 29.0                  | 10.0              | 55.0                 | 70.0                    | 10.0                                     | 0.5                              | 0.5                           |
| Algeria | 2004 | 29.0                  | 10.0              | 55.0                 | 70.0                    | 10.0                                     | 0.5                              | 0.5                           |
| Algeria | 2005 | 29.0                  | 10.0              | 55.0                 | 70.0                    | 10.0                                     | 0.5                              | 0.5                           |
| Algeria | 2006 | 29.0                  | 10.0              | 55.0                 | 70.0                    | 10.0                                     | 0.5                              | 0.5                           |
| Algeria | 2007 | 29.0                  | 10.0              | 55.0                 | 70.0                    | 10.0                                     | 0.5                              | 0.5                           |
| Algeria | 2008 | 29.0                  | 10.0              | 55.0                 | 70.0                    | 10.0                                     | 0.5                              | 0.5                           |
| Algeria | 2009 | 29.0                  | 10.0              | 55.0                 | 70.0                    | 10.0                                     | 0.5                              | 0.5                           |
| Algeria | 2010 | 29.0                  | 10.0              | 55.0                 | 70.0                    | 10.0                                     | 0.5                              | 0.5                           |
| Algeria | 2011 | 29.0                  | 10.0              | 55.0                 | 70.0                    | 10.0                                     | 0.5                              | 0.5                           |
| Algeria | 2012 | 29.0                  | 10.0              | 55.0                 | 70.0                    | 10.0                                     | 0.5                              | 0.5                           |
| Algeria | 2013 | 29.0                  | 10.0              | 55.0                 | 70.0                    | 10.0                                     | 0.5                              | 0.5                           |
| Algeria | 2014 | 29.0                  | 10.0              | 55.0                 | 70.0                    | 10.0                                     | 0.5                              | 0.5                           |
| Algeria | 2015 | 29.0                  | 10.0              | 55.0                 | 70.0                    | 10.0                                     | 0.5                              | 0.5                           |
| Algeria | 2016 | 29.0                  | 10.0              | 55.0                 | 70.0                    | 10.0                                     | 0.5                              | 0.5                           |
| Algeria | 2017 | 29.0                  | 10.0              | 55.0                 | 70.0                    | 10.0                                     | 0.5                              | 0.5                           |
| Algeria | 2018 | 29.0                  | 10.0              | 55.0                 | 70.0                    | 10.0                                     | 0.5                              | 0.5                           |
| Algeria | 2019 | 29.0                  | 10.0              | 55.0                 | 70.0                    | 10.0                                     | 0.5                              | 0.5                           |
| Algeria | 2020 | 29.0                  | 10.0              | 55.0                 | 70.0                    | 10.0                                     | 0.5                              | 0.5                           |
| Algeria | 2021 | 29.0                  | 10.0              | 55.0                 | 70.0                    | 10.0                                     | 0.5                              | 0.5                           |
| Algeria | 2022 | 29.0                  | 10.0              | 55.0                 | 70.0                    | 10.0                                     | 0.5                              | 0.5                           |
| Algeria | 2023 | 29.0                  | 10.0              | 55.0                 | 70.0                    | 10.0                                     | 0.5                              | 0.5                           |
| Algeria | 2024 | 29.0                  | 10.0              | 55.0                 | 70.0                    | 10.0                                     | 0.5                              | 0.5                           |
| Algeria | 2025 | 29.0                  | 10.0              | 55.0                 | 70.0                    | 10.0                                     | 0.5                              | 0.5                           |
| Algeria | 2026 | 29.0                  | 10.0              | 55.0                 | 70.0                    | 10.0                                     | 0.5                              | 0.5                           |
| Algeria | 2027 | 29.0                  | 10.0              | 55.0                 | 70.0                    | 10.0                                     | 0.5                              | 0.5                           |
| Algeria | 2028 | 29.0                  | 10.0              | 55.0                 | 70.0                    | 10.0                                     | 0.5                              | 0.5                           |
| Algeria | 2029 | 29.0                  | 10.0              | 55.0                 | 70.0                    | 10.0                                     | 0.5                              | 0.5                           |
| Algeria | 2030 | 29.0                  | 10.0              | 55.0                 | 70.0                    | 10.0                                     | 0.5                              | 0.5                           |
| Algeria | 2031 | 29.0                  | 10.0              | 55.0                 | 70.0                    | 10.0                                     | 0.5                              | 0.5                           |
| Algeria | 2032 | 29.0                  | 10.0              | 55.0                 | 70.0                    | 10.0                                     | 0.5                              | 0.5                           |
| Algeria | 2033 | 29.0                  | 10.0              | 55.0                 | 70.0                    | 10.0                                     | 0.5                              | 0.5                           |
| Algeria | 2034 | 29.0                  | 10.0              | 55.0                 | 70.0                    | 10.0                                     | 0.5                              | 0.5                           |
| Algeria | 2035 | 29.0                  | 10.0              | 55.0                 | 70.0                    | 10.0                                     | 0.5                              | 0.5                           |
| Algeria | 2036 | 29.0                  | 10.0              | 55.0                 | 70.0                    | 10.0                                     | 0.5                              | 0.5                           |
| Algeria | 2037 | 29.0                  | 10.0              | 55.0                 | 70.0                    | 10.0                                     | 0.5                              | 0.5                           |
| Algeria | 2038 | 29.0                  | 10.0              | 55.0                 | 70.0                    | 10.0                                     | 0.5                              | 0.5                           |
| Algeria | 2039 | 29.0                  | 10.0              | 55.0                 | 70.0                    | 10.0                                     | 0.5                              | 0.5                           |
| Algeria | 2040 | 29.0                  | 10.0              | 55.0                 | 70.0                    | 10.0                                     | 0.5                              | 0.5                           |
| Algeria | 2041 | 29.0                  | 10.0              | 55.0                 | 70.0                    | 10.0                                     | 0.5                              | 0.5                           |
| Algeria | 2042 | 29.0</                |                   |                      |                         |                                          |                                  |                               |